AMENDEMENTS TO THE SPECIFICATION

Please substitute the following paragraph for the paragraph on page 7, lines 1-3, as follows:

Figures ~~2A-G~~ 2-8 illustrate in cross-section the steps for fabricating an electro-optical device for sensing images in an image forming system according to the teachings of the present invention.

Please substitute the following paragraph for the paragraph on page 7, lines 9-16, as follows:

Figs. ~~2A-G~~ 2-8 illustrate in cross-section an electro-optical device 200 for sensing images in an image forming system. Image forming systems include electrophotographic, electrostatic or el ectrostatographic, ionographic, and other types of image forming or reproducing systems that are adapted to capture and/or store image data associated with a particular object, such as a document. The system of the present invention is intended to be implemented in a variety of environments, such as in any of the foregoing types of image forming systems, and is not limited to the specific systems described below.

Please substitute the following paragraph for the paragraph on page 7, lines 18-24, and continuing on to page 8, lines 1-5, as follows:

Referring to Fig. ~~2A~~ 2, a photosensitive chip, such as the chip 10 of Fig. 1, can be fabricated by providing a substrate 20. A number of photosensors 21-23 can be disposed within the substrate 20. Some surface irregularities are also shown as the surface topography 24. With a purpose of smoothing the surface irregularities that form the surface topography 24, a clear base layer 25 may be disposed on the top surface of the substrate. In other embodiments, the application of this clear base layer 25 may be omitted. As used herein, the term "smoothing" is intended to include reducing, eliminating, or preventing the formulation of relatively sharp profiles of irregularities or other formed topographical structures present in one or more layers of the chip, so as to promote or enhance the transfer or flow of a fluid material, such as the filter material, across the surface of the chips without creating significant layer thickness irregularities as measured across the surface of the chip.

Please substitute the following paragraph for the paragraph on page 8, lines 7-11, as follows:

Referring now to Fig. ~~2B~~ 3, a first filter layer 26 is disposed on top of the clear base layer 25. In one embodiment, the filter layer 26 may be applied using the technique of spin coating, as known to those of ordinary skill in the art. The filter layer 26 may contain, for example, acrylic, or polyimide and, in addition to filtering light, may act as a photoresist.

Please substitute the following paragraph for the paragraph on page 8, lines 13-24, as follows:

Referring to Fig. ~~2C~~ 4 the first filter layer 26 is patterned. In particular, methods known to those of ordinary skill in the art, such as etching, may be used to form a patterned first filter layer 27. One of the aims of the filter coat patterning is to dispose the first filter layer 26 on an area 266 of the base layer 25 that overlies the first photosensor 21. If the base layer 25 is omitted, the first filter layer 26 is disposed on an area 201 of the substrate 20 that overlies the first photosensor 21. Covering an area 266 of the base layer 25 that overlies the first photosensor 21 with a patterned first filter layer 27 preferentially allows light having a wavelength within a first range to reach the first photosensor 21. For example, the first filter layer 26 may be pigmented or dyed so that the only light that reaches the first photosensor 21 is light having a wavelength within a small range of frequencies near the frequency of a first primary color, such as red, green, or blue.

Please substitute the following paragraph for the paragraph on page 9, lines 1-24, as follows:

Referring to Fig. ~~2D~~ 5, an inter-filter layer 28 is disposed permanently over the patterned first filter layer 27 and on an area 288 of the base layer 25 not covered by the patterned first filter layer 27. If the base layer is omitted, an inter-filter layer 28 is disposed permanently on the patterned first filter layer 27 and at least on a portion 202 of the substrate 20, such as on an area 202 of the substrate 20 not covered by the patterned first filter layer 27. The term "inter-filter layer" as used herein is intended to include any suitable layer compatible with the other chip layers for allowing radiation to pass therethrough and for smoothing

the topography (surface) of the chip 10. The inter-filter layer can be composed of any suitable material sufficient to allow radiation to pass therethrough, such as acrylic, polyimide or other optically transmissive film-forming polymer material. The inter-filter layer 28 acts to smooth the top surface of the assembly shown in Fig. ~~2C~~ 4 to prepare the surface for the application of a second filter layer. The inter-filter layer 28 is disposed permanently in the sense that it is not necessary to remove the inter-filter layer 28 by grinding and/or polishing to the level of the patterned first filter layer 27 prior to the application of the second filter layer. Instead, in what is an advantage of the present invention, the second filter layer is applied directly on the inter-filter layer 28 without having to remove or grind down the layer 28. In one embodiment, the inter-filter layer 28 is translucent and clear. In another embodiment, the inter-filter layer 28 may be translucent, but have a slight color. This latter embodiment may be useful in cases where the inter-filter layer is used to modify the incoming wavelengths in a similar fashion as the filters. The inter-filter layer 28 may be composed of any optically transmissive, film-forming polymer, such as acrylic, polyimide, polymethylmethacrylate (PMMA), and/or diazonovolak compounds.

Please substitute the following paragraph for the paragraph on page 10, lines 1-6, as follows:

Referring to Fig. ~~2E~~ 6, a second filter layer 29 is disposed over the inter-filter layer 28. In one embodiment, the second filter layer 29 can also be applied using spin coating, as known to those of ordinary skill in. the art. The second filter layer 29 may contain, for example, acrylic or polyimide and, in addition to acting as a filter of light, may act as a photoresist.

Please substitute the following paragraph for the paragraph on page 10, lines 8-18, as follows:

As illustrated in Fig. ~~2F~~ 7, the second filter layer 29 can then be patterned. In particular, methods known to those of ordinary skill in the art, such as etching, may be used to form a patterned second filter layer 298. One of the aims of the patterning is to dispose the second filter layer 29 over at least a portion 299 of the inter-filter layer 28, such as on an area 299 of the inter-filter layer 28 that overlies the second photosensor 22. Covering an area 299 of the inter-filter layer

28 that overlies the second photosensor 22 with a patterned second filter layer 298 preferentially allows light having a wavelength within a second range to reach the second photosensor 22. For example, the second filter layer 29 may be pigmented or dyed so that only light having a wavelength within a small range of frequencies near the frequency of a second primary color reaches the second photosensor 22.

Please substitute the following paragraph for the paragraph on page 10, lines 20-23, as follows:

As illustrated in Fig. ~~2G~~ 8, if additional layers are desired, a second inter-filter layer 270 can be disposed over the patterned second filter layer 298 and over an area 271 of the first inter-filter layer 28 not covered by the patterned second filter layer 298, as described above with reference to Fig. ~~2D~~ 5.

Please substitute the following paragraph for the paragraph on page 10, lines 20-23, as follows:

Referring to Fig. ~~3~~ 9, a flow chart is shown illustrating the steps of fabricating an electro-optical device 200 for image sensing according to the teachings of the present invention. In step 31, a substrate 20 of the electro-optical device 200 is provided, which functions as a foundation on which additional layers are applied. In step 32, any suitable number of photosensors, such as a first photosensor 21 and a second photosensor 22, are inserted into the substrate 20 of the electro-optical device 200. In optional step 33, a base layer 25 is applied on the substrate 20 by, for example, spin coating. In other embodiments of the present invention, the step of applying a base layer 25 may be omitted. In step 34, an area of the base layer 25 that overlies one or more photosensors, such as the first photosensor 21, is covered with a patterned first filter layer 27. The first filter layer 26 preferably allows light having a wavelength within a first range to reach the first photosensor 21. To cover the base layer 25 over the first photosensor 21 with the patterned first filter layer 27, the layer 26 may initially be applied on the whole surface of the base layer 25 and subsequently etched to leave the patterned filter layer 27 disposed over the first photosensor 21. Next, in step 35, the inter-filter layer 28 is applied on the patterned first filter layer 27 and on an area of the base layer 25 not covered by

the patterned first filter layer 27, thereby smoothing a top surface of the electro-optical device 200. Subsequently, in step 36, without removing the inter-filter layer 28, the inter-filter layer 28 may be covered over the second photosensor 22 with a second filter layer 29, the second filter layer 29 preferentially allowing light having a wavelength within a second range to reach the second photosensor 22. As in step 34, the second filter 29 may first be applied over the whole surface and then etched to leave the patterned second filter layer 298 over the second photosensor 22.

CONCLUSION

The specification was amended to correct the Figure numbers as referenced in the formal drawings submitted with the Amendment After Final mailed January 5, 2004.

No additional fee is believed to be required for this Supplemental Amendment After Final. However, the undersigned attorney of record hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Deposit Account No. 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark S. Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

1/15/04
Date

Mark S. Svat
Reg. No. 34,261
1100 Superior Avenue, 7th Floor
Cleveland, Ohio 44114-2579
(216) 861-5582

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